

## **REMARKS/ARGUMENTS**

The Applicants acknowledge, with thanks, receipt of the Office Action mailed May 22, 2007. The application was filed with 22 claims. All claims were rejected under applied art including Lin, et al., Ito, et al. and Yoda. The Examiner further raised non-art concerns relative to the specification, drawings and claims. Previous claims 1-22 have been cancelled, and new claims 23-28 substituted therefor. Amendment has been made to address the non-art concerns.

The Examiner objected the specification, noting an incomplete sentence on page 2, line 3. Amendment has been tendered that reflects conversion from and RGB space to a CMY space common to printing devices as will be appreciated by one of ordinary skill in the art. See, e.g., Lin, et al., applied by Examiner, col. 1, lines 52-66.

The Examiner also objected to the specification noting that, on page 2, line 15, "outside the gamut or mapped" is more appropriately, "outside the gamut are mapped." The Examiner's observation and suggestion are appreciated, and corresponding amendment has been tendered.

In the drawings, the Examiner noted that item 304 of Figure 3 should be reflected in the detailed description. A corresponding amendment has been tendered.

By way of review, the subject application teaches a system and method by which actual device output characteristics, such as color output properties of a printer, are used to adjust a color transform, such as from RGB encoded images to CMY(K) encoded images. Conversion systems suitably employ device link profiles, which are suitably thought of as a cube. The 8 vertices or nodes of the cube are defined by the primaries in the color spaces CMYRGB, coupled with two additional vertices, one for black and one for white. Each node on the cube has CMYK output values, and values in between the vertices are interpolated. Such a conversion system relies on color conversions dictated by values at the nodes. Real world output devices vary on factors such as colorant properties, saturation levels, and the like. Actual device characteristics can vary among printer families, or even among individual printers within a family.

In addition to the foregoing, there are many variations on gamuts associated with incoming graphical information which needs to be converted to a subtractive color space, such as CMY(K), for image rendering. Devices with large source spaces have markedly different characteristics, for example, from devices having relative small source spaces, such as sRGB. Image rendering with conversions made from constrained color space inputs can be greatly affected by individual properties among various rendering devices.

The subject application teaches a system by which a conventional device link profile is advantageously supplemented with additional information derived from an actual output from an image rendering device. Thus, a suitable adjustment is made to a conventional conversion that relies on values at the nodes and interpolations of values in between, which adjustment is based on actual device properties. This is particularly advantageous in constrained gamut input devices. An actual output is suitably supplemented by measured rendering characteristics. This is suitably completed in a secondary table of values, which table may further be linked to a device tag for specific reference thereto.

Turning to the art of record, Ito is directed to a conversion system which employs algorithms for conversion between input and output color gamuts. No teaching is made relative to adjustment for device characteristics. Similar deficiencies are found in the teachings of Lin and Yoda.

Newly added independent claims 23 and 26 include novel aspects from the art of record as summarized above. More particularly, each claim now includes limitations wherein a first conversion is adjusted in accordance with actual device characteristics. In addition, dependent claims further clarify that such device characteristics are suitably reflected in accordance with tag data. See, e.g., specification at page 5, line 26, et seq.

In view of the afore-noted amendments and comments, it is submitted that all claims are patentably distinct over the art of record and in condition for allowance thereover. An early allowance of all claims is respectfully requested.

If there are any fees necessitated by the foregoing communication, the Commissioner is hereby authorized to charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 66329/24817.

Respectfully submitted,

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